Amendments to the Specification:

Please replace Paragraph [0001] on page 1 of the instant application with the following:

"This application is a continuation of co-pending U.S. patent application Serial No. 10/086,043 filed February 28, 2002 and a continuation-in-part of ~~co-pending~~ U.S. patent application Serial No. 09/877,383 filed on June 8, 2001, now U.S. Patent No. 6,631,328, which itself is a continuation-in-part of U.S. Patent Application Serial No. 06/608,205, filed June 30, 2000, now U.S. Patent No. 6,366,858."

Please replace Paragraph [0111] on page 41 of the instant application with the following:

"Suppose the function $h_o(\sigma,\varepsilon)$ represents a model that estimates the measurements as a function of the conductivity and dielectric constant which includes details of the tool that are to be normalized away (i.e. finite antennas and a metallic mandrel). Suppose $h_1(\sigma,\varepsilon)$ is a simplified model which is a function of the same formation parameters (i.e. the resistivity and the dielectric constant) but that assumes infinitesimal antennas and no metallic mandrel. The data shown in Figure 10 are for the medium spaced 2 MHz measurement described in conjunction with Figure 7. The first two columns of data resistivity (1/sigma) and dielectric constant (eps_rel) values are input into the respective models (which are not used in the algorithm, but are shown to illustrate how the table is generated). It was found that when the resistivity and dielectric constant are not both large, satisfactory results can be achieved by calculating the data as a function of the conductivity for only one dielectric constant, and in this embodiment, a relative dielectric constant of 35 was used. The third column (db_pt) contains the attenuation values for the simplified model evaluated as a function of conductivity, and the fourth column (db_man) contains the attenuation values for the model which explicitly accounts for the finite sized antennas and metallic mandrel. The fifth (deg_pt) and sixth (deg_man) columns are similar to the third and fourth columns but for the phase shift instead of the

attenuation. All data are calibrated to read zero if the electrical parameters of the surrounding medium are ~~substantially~~ that of a vacuum (i.e., the air) ($\sigma = 0, \varepsilon = 1$). Specifically, columns 3 and 4 are:

$$g'_a = \text{db\_pt} = 20\log 10(|\, h_1(\sigma,\varepsilon)/h_1(0,1)\,|)$$

$$g_a = \text{db\_man} = 20\log 10(|\, h_0(\sigma,\varepsilon)/h_0(0,1)\,|)$$ ”